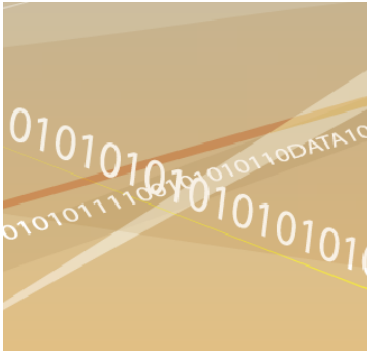


Technology Plan
North Carolina
Department of Health and Human Services





Version 1.0

NC DHHS Division of Information Resource Management (DIRM)

December 1, 2006

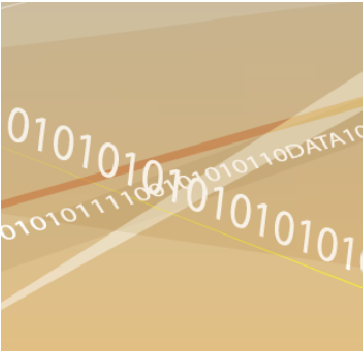


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1. Introduction

1.1. Purpose

The North Carolina Department of Health and Human Services (NC DHHS) submits this *Technology Plan* to the following entities in response to Session Law 2005-0276:

- Office of Information Technology Services (NC ITS)
- Senate Appropriations Committee on Health and Human Services
- House of Representatives Appropriations Subcommittee on Health and Human Services
- Fiscal Research Division of the NC General Assembly

This *Plan* outlines the major technology changes needed to overcome current business challenges and enhance the delivery of NC DHHS services and benefits.

Note. Readers of this Technology Plan should be familiar with the Business Plan, and 2007-2009 Biennium IT Plan for NC DHHS.

1.2. Scope

This Technology Plan covers a three-year period beginning July 1, 2007 and ending June 30, 2010, and provides readers with an awareness of the following:

- The major, technology-addressable, strategic challenges currently facing NC DHHS business areas
- The major technology strategies needed to enable the preferred future business environment
- The three-year technology plan for NC DHHS

Significant to understanding the aforementioned, is having knowledge of the mission and vision of the Division of Information Resource Management (DIRM), which is the principal information technology (IT) unit of NC DHHS. *Section 2* explains.

2. Mission and Vision of DIRM

The mission of the Division of Information Resource Management (DIRM) is to provide enterprise, information technology leadership to NC DHHS and its partners so that they can leverage technology resulting ultimately in delivery of consistent, cost effective, reliable, accessible, and secure services.

It is important to emphasize that DIRM provides *enterprise*, information technology leadership. Some NC DHHS divisions and offices have information technology departments that are responsible for meeting the unique needs of their respective areas. The NC DHHS Secretary delegates authority to DIRM, via Directive II-12 (refer to *Appendix 6.3*), and defines the boundaries between DIRM's IT role and that of information technology departments located in individual divisions and offices.

DIRM's vision for the period between July 1, 2007 and June 30, 2010, is that it will support DHHS' commitment to provide nationally recognized quality services to the people of North Carolina through efficient, secure, and reliable IT service delivery. As the subsequent sections of this *Technology Plan* convey, fulfilling DIRM's mission and

vision will require significant technology changes to overcome the major strategic business challenges facing the Department. Some of the changes will be at the enterprise-level and coordinated by DIRM, while others will be at the level of the various divisions and offices, with DIRM providing guidance, oversight, and/or advice.

3. Major Strategic Business Challenges

This section examines the major enterprise and divisional issues over which information technology can affect change.

3.1. Enterprise Challenges

Five major issues resurface across NC DHHS and interfere with the Department's ability to meet quality and performance measures, optimally:

- The approach taken to design and deliver programs and services
- The path to organizational development, quality, and performance management
- The allocation of personnel, technological and financial resources
- The approach taken to manage information systems and technology
- The approach taken to manage human resources and overall administration

3.1.1. Design and Delivery of Programs and Services

The mission of NC DHHS is to provide efficient services that enhance the quality of life of North Carolina individuals and families so that they have opportunities for healthier and safer lives resulting ultimately in the achievement of economic and personal independence.

Twenty-five separate divisions and offices work to accomplish the NC DHHS mission. However, from the perspective of the NC residents it serves, the Department must at times appear disjointed as current delivery systems cause residents to answer multiple requests for the same information, carry or wait for NC DHHS business units to transfer records from one office to another, or simply "get lost in the system."

Business Requirement: *NC DHHS needs to employ an enterprise-wide approach in the design and delivery of programs and services for the ultimate benefit of North Carolina residents by providing seamless access to an array of services and ensuring access to services by people with special needs.*

3.1.2. Organizational Development, Quality and Performance Management

Almost every division and office in NC DHHS has some responsibility to use best practices and environmental trends to set policy, plan, research, collaborate, and justify activities based on evidence. However, as indicated in the *NC DHHS Business Plan*, some areas do not have clear-cut means to collect, analyze, weigh, and report development, quality, and performance data in a way that is understandable, reliable, and meaningful. This situation limits management's ability to make decisions based on metrics, grow the organization, and keep up with changes.

Business Requirement: *Sustain a culture of continuous improvement by identifying and implementing best practices and measuring for results; empowering decision makers; sustaining a high performance workforce; and providing tools to enable decision-making.*

3.1.3. Human Resources Management, Overall Administration and Resource Allocation

NC DHHS has limited technology to support human resources management and administration. As a result, NC DHHS is snowed under manual processes for almost every related aspect including the following:

- Justifying staff positions
- Attracting and retaining qualified employees
- Tying training, recruitment and compensation to current and future needs for staffing and competencies
- Keeping track of employee time, compensation, attendance, and schedules
- Managing employee productivity, growth and performance
- Justifying and managing outsourcing and contractual arrangements
- Adapting funding availability to meet enterprise business needs

Moreover, as publicized in the *NC DHHS Business Plan*, the Department's divisions, and offices are confronting a growth in eligible populations (i.e., aged, children, disabled, destitute, et cetera); an increase in the number of immigrants; a rise in the costs of services and care; and a decrease in the number of service providers. Each challenge pressures business operations to deliver more, be more available, and broaden capacity. In turn, giving rise to an increase in the demand for IT services.

Lamentably, personnel, time, and dollars are not available to satisfy every request to add or enhance IT. Moreover, the status quo processes for making IT investment decisions are not always coordinated across the enterprise and hence, have brought about a duplicated, fragmented IT environment.

Business Requirements:

NC DHHS needs to be able to drive operational decisions and resource allocation by maximizing the use of human, technological and financial resources to enable business activities through coordinated planning processes.

NC DHHS needs to employ an enterprise-wide approach in the design and delivery of programs and services for the ultimate benefit of North Carolina residents by utilizing program funds in a flexible manner that is responsive to changing needs, maximizes outcomes, and meets state and federal requirements.

3.1.4. Information Systems and Technology Management

Information systems and technology for NC DHHS contribute directly to worker productivity, the cost, quality and accuracy of benefits and services delivered, fraud prevention and detection, employee turnover, avoidance of Federal and State penalties for noncompliance, and the time it takes for NC DHHS to respond to policy and regulatory changes. However, despite the important contributions of information

systems and technology, a recurring theme across NC DHHS divisions and offices is that most of the IT systems and equipment deployed are beyond their useful life expectancy and/or are not capable of handling recent changes to business requirements.

This issue goes across shared infrastructures, as well as divisional systems. This *Technology Plan* provides details about the divisional system concerns in the next section, but as examples of the issues surrounding shared infrastructures, note the following:

- Eighty-three percent (83%) of the network infrastructure that supports Dorothea Dix campus is outdated
- Eighty-one percent (81%) of the network infrastructure that supports the Department's most critical facilities require replacement. This infrastructure provides support to twenty-two (22) ACTS county locations, the Albemarle Building, the One Bank America Building, and offices of the Division of Facility Services (DFS) that are located in Lexington, NC.
- Seventy-four percent (74%) of production servers are beyond their life expectancy and require replacement.
- The two-high speed printers used by the DIRM Printing Unit that produces billing statements, benefits checks, and Medicaid and other health-related notifications were originally purchased in 1999, have exceeded their expected useful life and their total impressions count.
- The desktop environment in NC DHHS is partially State-owned and partially Seat-managed. This situation yields a mixture of nonstandard platforms, technologies and applications, and makes it difficult to track assets.

Overall, the obsolescence, incompatibilities, and lifecycle management deficiencies are adversely affecting relationships with customers, employees, suppliers, and providers of services. The lack of having modern IT systems and equipment is presenting barriers to sharing and accessing data, recruiting and retaining personnel, meeting Federal and State requirements, being productive, putting forth quality, serving customers, and stabilizing business.

Business Requirement: *NC DHHS needs to improve services to consumers and relationships with suppliers and providers by modernizing information systems and technology.*

3.2. Divisional Challenges

Eight NC DHHS divisions and offices presented major business challenges affording grounds for technology-related actions:

- Division of Aging and Adult Services (DAAS)
- Division of Child Development (DCD)
- Division of Facility Services (DFS)
- Division of Medical Assistance (DMA)
- Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMH/DD/SAS)
- Division of Public Health (DPH)

- Division of Social Services (DSS)
- Office of Education Services (OES)

3.2.1. Division of Aging and Adult Services (DAAS)

The mission of the Division of Aging and Adult Services (DAAS) is to promote the independence and enhance the dignity of North Carolina's older adults, persons with disabilities, and their families through a community-based system of opportunities, services, benefits, and protections that offer choice; and to help younger generations prepare for their later years.

Table 1 lists the high-level, core activities, and the current state of process automation that DAAS faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 1 DAAS Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Adult Reception, Assessment, and Intake	No application is known to address this core activity: <ul style="list-style-type: none"> Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Accuracy of benefits payments Occurrences of fraud
Adult Eligibility and Application	The following application is known to address this core activity: <ul style="list-style-type: none"> Eligibility Information System (EIS), which is technically obsolete, costly to maintain and or operate, and uses declining or irreplaceable skills 	<ul style="list-style-type: none"> Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Accuracy of benefits payments Occurrences of fraud
Adult and Family Case Management	The following application is known to address this core activity: <ul style="list-style-type: none"> Disinterested Public Agent Guardians - DPAG Bond (Blanket Bonds), which is technically obsolete, costly to maintain and or operation, and uses declining or irreplaceable skills 	<ul style="list-style-type: none"> Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Indices of frequency of abuse cases Preventability (e.g., early detection, retarding progress of a situation) Accuracy of benefits payments Occurrences of fraud
Adult and Family Benefits and Services Delivery	The following application is known to address this core activity: <ul style="list-style-type: none"> Aging Resources Management System 	<ul style="list-style-type: none"> Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Indices of frequency of abuse cases Accuracy of benefits payments Occurrences of fraud
DAAS Human Resources Management	No application is known to address this core activity: <ul style="list-style-type: none"> Time- and paper-intensive, manual processes for managing personnel productivity, payroll, attendance, scheduling, growth and performance 	<ul style="list-style-type: none"> Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Indices of frequency of abuse cases Preventability (e.g., early detection, retarding progress of a situation) Accuracy of benefits payments Occurrences of fraud

Core Activities	Current State of Process Automation	Quality and Performance Measures
Aging and Adult Policy and Regulatory Enforcement	The following application is known to address this core activity: <ul style="list-style-type: none"> Ombudsman Complaint Tracking System 	<ul style="list-style-type: none"> Indices of frequency of abuse cases Preventability (e.g., early detection, retarding progress of a situation) Occurrences of fraud
Aging and Adult Protection and Abuse Prevention	The following application is known to address this core activity: <ul style="list-style-type: none"> Adult Protective Services Register, which is technically obsolete, costly to maintain and or operate, and/or uses declining or irreplaceable skills 	<ul style="list-style-type: none"> Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Indices of frequency of abuse cases Preventability (e.g., early detection, retarding progress of a situation) Occurrences of fraud
DAAS Quality and Performance Management	No application is known to address this core activity: <ul style="list-style-type: none"> Time- and paper-intensive, manual processes that do not provide a straightforward mechanism for collecting, analyzing, weighing, and reporting development, quality, and performance data in a way that is understandable, reliable, and meaningful 	<ul style="list-style-type: none"> Accuracy of benefits payments Accuracy of billing reports (e.g., count of errors in reporting) Amount of accounts receivable balances Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Cash flow Indices of frequency of abuse cases Occurrence of payment adjustments Occurrences of fraud Preventability (e.g., early detection, retarding progress of a situation) Quality of care, procedures, and services to recipients Staff time spent completing paper forms/records Staff turnover Worker productivity
Aging and Adult Services Collaboration	No application is known to address this core activity: <ul style="list-style-type: none"> Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> Case and social worker productivity (e.g., time spent completing and processing paper forms/records) Indices of frequency of abuse cases Preventability (e.g., early detection, retarding progress of a situation) Accuracy of benefits payments Occurrences of fraud

3.2.2. Division of Child Development (DCD)

The mission of the Division of Child Development (DCD) is to promote and support high quality early care and education to build a stronger social and economic future for North Carolina.

Table 2 lists the high-level, core activities, and current state of process automation that DCD faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 2 DCD Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Child Development Surveillance and Monitoring	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> Criminal Background Check System, which does not have adequate technical support personnel: <p>In addition, DCD workers have limited ability to access data from remote field locations.</p>	<ul style="list-style-type: none"> Child Care Workforce Education and Experience Distribution of Child Care License Ratings (e.g., number of 1-star, 2-star... 5-star licenses) Number of Incidents in Child Care Facilities/Homes
DCD Administration	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> Day Care Reimbursement (Subsidized Child Care Reimbursement) Smart Start Reporting System <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> Worker productivity Quality of care, procedures, and services to recipients Staff time spent completing paper forms/records Amount of accounts receivable balances Cash flow Staff turnover Occurrence of payment adjustments Accuracy of billing reports (e.g., count of errors in reporting)
Child Development Education and Communication	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> Child Development Public Web Site Early Childhood Workforce <p>Some do not have adequate technical support personnel</p> <p>In addition, DCD workers review and process numerous paper applications and transcripts to enable a determination of whether a childcare worker's credentials are sufficient to provide child care services in North Carolina.</p>	<ul style="list-style-type: none"> Child care workforce compensation Child care workforce education and experience Child care workforce turnover Number of incidents in child care facilities/homes
Child Development Collaboration and Research	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> Number of Children on Waiting List to Receive Child Care Number of Incidents in Child Care Facilities/Homes
Child Development Policy and Regulatory Enforcement	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> Child Care (Day Care) Regulatory Administrative System Child Care (Day Care) Regulatory Laptop System Child Care (Day Care) Regulatory Web System <p>Some do not have adequate technical support personnel</p>	<ul style="list-style-type: none"> Child Care Workforce Education and Experience Child Care Workforce Turnover Distribution of Child Care License Ratings (e.g., number of 1-star, 2-star... 5-star licenses) Number of Children on Waiting List to Receive Child Care Number of Incidents in Child Care Facilities/Homes

Core Activities	Current State of Process Automation	Quality and Performance Measures
DCD Human Resources Management	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> Child Development Intranet Web Site 	<ul style="list-style-type: none"> Child care workforce compensation Child care workforce education and experience Child care workforce turnover Distribution of childcare license ratings (e.g., number of 1-star, 2-star... 5-star licenses) Number of children on waiting list to receive child care Number of incidents in child care facilities/homes
Child Care Assistance to Parents	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> Day Care Reimbursement (Subsidized Child Care Reimbursement), which is technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills 	<ul style="list-style-type: none"> Child care workforce compensation Distribution of childcare license ratings (e.g., number of 1-star, 2-star... 5-star licenses)
DCD Quality and Performance Management	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> Smart Start Reporting System 	<ul style="list-style-type: none"> Accuracy of billing reports (e.g., count of errors in reporting) Amount of accounts receivable balances Cash flow Child care workforce compensation Child care workforce education and experience Child care workforce turnover Distribution of childcare license ratings (e.g., number of 1-star, 2-star... 5-star licenses) Number of Children on Waiting List to Receive Child Care Number of Incidents in Child Care Facilities/Homes Occurrence of payment adjustments Quality of care, procedures, and services to recipients Staff time spent completing paper forms/records Staff turnover Worker productivity
DCD Technical Assistance to Child Care Providers	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> Time- and paper-intensive, manual processes that prevent field workers from responding in a timely manner 	<ul style="list-style-type: none"> Child care workforce compensation Child care workforce education and experience Child care workforce turnover Distribution of childcare license ratings (e.g., number of 1-star, 2-star... 5-star licenses) Number of children on waiting list to receive child care Number of incidents in child care facilities/homes

3.2.3. Division of Facility Services (DFS)

The mission of the Division of Facility Services (DFS) is to regulate medical, mental health and group care facilities, emergency medical services, and local jails. DFS improves the health, safety, and well-being of individuals through effective regulatory and remedial activities including appropriate consultation and training opportunities and the rational allocation of needed facilities and services.

Table 3 lists the high-level, core activities, and current state of process automation that DFS faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 3 DFS Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Health Services Facility Surveillance and Monitoring	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • DFS Abuse Investigations Program • Complaint Tracking System • Facility Services Query and Reports Application • Health Care Personnel Investigation System • Health Care Personnel Letters System • SB10 Long Term Care Safety System • Jails - Local Confinement System • Master Facility File • Master Facility File Reporting System • Medication Aide Testing System • Nurse Aide Registry • Nurse Aide Training • Voice Response Interface <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>In addition, the functionalities provided by these systems are individually packaged and complicated to share.</p>	<ul style="list-style-type: none"> • Number of credentialed EMS Personnel reviewed by the North Carolina EMS Disciplinary Committee • Adult Care and Nursing Home Workforce Turnover • Number of Adult Care and Nursing Home Incidents • Utilization Rates (e.g., occupancy of licensed beds)
Health Services Facility Collaboration	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • DFS Abuse Investigations Program • DFS MFF/EIS Query Interface • Facility Services Query and Reports Application • Master Facility File • Master Facility File Reporting System <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>In addition, the functionalities provided by these systems are individually packaged and complicated to share.</p>	<ul style="list-style-type: none"> • Number of Adults on Waiting List to Receive Adult Care and Nursing Home Services • Number of Adult Care and Nursing Home Incidents • Utilization Rates (e.g., occupancy of licensed beds)
Certificate of Need (Application for New/Changed Facilities)	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> • Number of FTE paid staff per number of licensed beds • Number of Adults on Waiting List to Receive Adult Care and Nursing Home Services • Utilization Rates (e.g., occupancy of licensed beds)
Emergency Medical Services Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • EM Today System • EMS Certification/Manpower/Inventory • Pre-Hospital Medical Information System 	<ul style="list-style-type: none"> • Number of Credential EMS Personnel reviewed by the North Carolina EMS Disciplinary Committee • Indices of severity (e.g., no. of days of disruption, fatality ratio, hospitalization rates)

Core Activities	Current State of Process Automation	Quality and Performance Measures
<p>Health Services Facility Education and Communication</p>	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • DFS Abuse Investigations Program • EM Today System • Facility Services Query and Reports Application • Master Facility File • Master Facility File Reporting System • Nurse Aide Registry • Nurse Aide Training • Voice Response Interface • DFS Web Application <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>The functionalities provided by these systems are individually packaged and complicated to share.</p>	<ul style="list-style-type: none"> • Number of credentialed EMS Personnel reviewed by the North Carolina EMS Disciplinary Committee • Number of FTE paid staff per number of licensed beds • Adult Care and Nursing Home Workforce Compensation • Adult Care and Nursing Home Workforce Education and Experience • Adult Care and Nursing Home Workforce Turnover • Number of Adults on Waiting List to Receive Adult Care and Nursing Home Services • Number of Adult Care and Nursing Home Incidents • Utilization Rates (e.g., occupancy of licensed beds)
<p>DFS Human Resources Management</p>	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes for managing personnel productivity, payroll, attendance, scheduling, growth and performance 	<ul style="list-style-type: none"> • Number of credentialed EMS Personnel reviewed by the North Carolina EMS Disciplinary Committee • Number of FTE paid staff per number of licensed beds • Adult Care and Nursing Home Workforce Compensation • Adult Care and Nursing Home Workforce Education and Experience • Adult Care and Nursing Home Workforce Turnover • Number of Adults on Waiting List to Receive Adult Care and Nursing Home Services • Number of Adult Care and Nursing Home Incidents • Utilization Rates (e.g., occupancy of licensed beds)

Core Activities	Current State of Process Automation	Quality and Performance Measures
<p>Health Services Facility Policy and Regulatory Enforcement</p>	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • DFS Abuse Investigations Program • Complaint Tracking System • Facility Services Query and Reports Application • Health Care Personnel Investigation System • Health Care Personnel Letters System • SB10 Long Term Care Safety System • Jails - Local Confinement System • Medication Aide Testing System • Nurse Aide Registry • Nurse Aide Training • Voice Response Interface <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>The functionalities provided by these systems are individually packaged and complicated to share.</p> <p>Furthermore, the State of North Carolina has implemented a statute that requires all care provider facilities to post telephone numbers for Nursing Home Complaints. The statute was passed under G.S. 122C-25 for mental health homes, G.S. 131D-2 (j) for adult care homes, and G.S. 131E-141 (c) for home care agencies. G.S. 131E-141 also requires that an agency must provide each client with a written notice of the Division of Facility Services hotline number in advance of furnishing care to the client or during the initial evaluation visit before the initiation of services. To comply with the statutes, upgrades to the existing telephone system used for hotline support to accommodate the capacity of calls. Failure to upgrade the system will result in a substantial negative impact to the citizens of North Carolina that need to use this service.</p>	<ul style="list-style-type: none"> • Number of credentialed EMS Personnel reviewed by the North Carolina EMS Disciplinary Committee • Number of FTE paid staff per number of licensed beds • Adult Care and Nursing Home Workforce Compensation • Adult Care and Nursing Home Workforce Education and Experience • Adult Care and Nursing Home Workforce Turnover • Number of Adults on Waiting List to Receive Adult Care and Nursing Home Services • Number of Adult Care and Nursing Home Incidents • Utilization Rates (e.g., occupancy of licensed beds)

Core Activities	Current State of Process Automation	Quality and Performance Measures
DFS Quality and Performance Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • DFS Abuse Investigations Program • Master Facility File (MFF) • Master Facility File Reporting System • Complaint Tracking System <p>The functionalities provided by these systems are individually packaged and complicated to share.</p> <p>As an example, currently the annual process is labor intensive and takes months to complete. A thick packet containing information printed from the MFF is mailed across the State to thousands of facilities, which are asked to verify that the information is correct. These forms are returned to DFS where a temporary employee hired for roughly three months enters changed or new data into a system.</p>	<ul style="list-style-type: none"> • Accuracy of billing reports (e.g., count of errors in reporting) • Adult Care and Nursing Home Workforce Compensation • Adult Care and Nursing Home Workforce Education and Experience • Adult Care and Nursing Home Workforce Turnover • Amount of accounts receivable balances • Cash flow • Indices of severity (e.g., number of days of disruption, fatality ratio, hospitalization rates) • Number of Adult Care and Nursing Home Incidents • Number of Adults on Waiting List to Receive Adult Care and Nursing Home Services • Number of credentialed EMS Personnel reviewed by the North Carolina EMS Disciplinary Committee • Number of FTE paid staff per number of licensed beds • Number of credentialed EMS Personnel reviewed by the North Carolina EMS Disciplinary Committee • Number of FTE paid staff per number of licensed beds • Occurrence of payment adjustments • Quality of care, procedures, and services to recipients • Staff time spent completing paper forms/records • Staff turnover • Utilization Rates (e.g., occupancy of licensed beds) • Worker productivity

3.2.4. Division of Medical Assistance (DMA)

The mission of the Division of Medical Assistance (DMA) is to provide access to medically necessary health care services to eligible NC residents so they can obtain high value, high quality health care services resulting ultimately in improved quality of life.

Table 4 lists the high-level, core activities, and current state of process automation that DMA faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 4 DMA Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Medical Assistance Provider Enrollment	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> Medicaid Management Information System (MMIS), which is technically obsolete, costly to maintain and or operate, and/or uses declining or irreplaceable skills 	<ul style="list-style-type: none"> No. of Enrolled Providers
Medical Assistance Benefits and Services Delivery	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> CSR Time Tracking Tool Medicaid Management Information System (MMIS) Third Party Query (SSA SVES Verifications) <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>The current MMIS does not fully support a multi-payer strategy across healthcare services provided by NC DHHS.</p>	<ul style="list-style-type: none"> Loss Ratio (e.g., incurred claims/total plan revenue) Reversal Rate (e.g., reversed utilization review appeal) Complaint rate (e.g., number of complaints decided in favor of covered person/total number of complaints received from covered persons) Claims Error Rate
Medical Assistance Eligibility Determination	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> Beneficiary Earnings Exchange Report Eligibility Information System (EIS) Employment Security Commission (ESC) Match Internal Revenue Service (IRS) 1099 Match Master Client Index (PARIS Interstate, VA Matches) SSA Beneficiary Data Exchange (Bendex) Supplemental Security Income (SSI), or State Data Exchange (SDX) <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> Loss Ratio (e.g., incurred claims/total plan revenue) Eligibility Determination Percent Accuracy Rate
Medical Assistance Collaboration and Research	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> Medicaid Accounting System, which is technically obsolete, costly to maintain and or operate, and/or uses declining or irreplaceable skills 	<ul style="list-style-type: none"> Loss Ratio (e.g., incurred claims/total plan revenue) Reversal Rate (e.g., reversed utilization review appeal) Complaint rate (e.g., number Of complaints decided in favor of covered person/total number Of complaints received from covered persons) Eligibility Determination Percent Accuracy Rate Claims Error Rate
DMA Human Resources Management	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> Time- and paper-intensive, manual processes for managing personnel productivity, payroll, attendance, scheduling, growth and performance 	<ul style="list-style-type: none"> Loss Ratio (e.g., incurred claims/total plan revenue) Reversal Rate (e.g., reversed utilization review appeal) Complaint rate (e.g., number of complaints decided in favor of covered person/total number of complaints received from covered persons) Eligibility Determination Percent Accuracy Rate Claims Error Rate

Core Activities	Current State of Process Automation	Quality and Performance Measures
DMA Administration	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> Medicaid Accounting System, which is technically obsolete, costly to maintain and or operate, and/or uses declining or irreplaceable skills 	<ul style="list-style-type: none"> Worker productivity Quality of care, procedures, and services to recipients Staff time spent completing paper forms/records Amount of accounts receivable balances Cash flow Staff turnover Occurrence of payment adjustments Accuracy of billing reports (e.g., count of errors in reporting)
Medical Assistance Policy and Regulatory Enforcement	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> Claims Processing Assessment System Enterprise Program Integrity Control System Fraud and Abuse Detection System Medical Assistance Quality Control Sampling System Home Office NF & ICF/MR Cost Report Hospital Based Cost Report ICFMR CR Nursing Cost Report <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>In addition, the number of provider requests for prior approval is escalating. The existing processes for prior approval are too inefficient and costly to support the additional demand.</p>	<ul style="list-style-type: none"> Loss Ratio (e.g., incurred claims/total plan revenue) Reversal Rate (e.g., reversed utilization review appeal) Complaint rate (e.g., number of complaints decided in favor of covered person/total number of complaints received from covered persons) Eligibility Determination Percent Accuracy Rate Claims Error Rate No. of Enrolled Providers
DMA Quality and Performance Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> Claims Processing Assessment System Data Retrieval Information Validation Engine/DRIVE Enterprise Program Integrity Control System Fraud and Abuse Detection System Medical Assistance Quality Control Sampling System Home Office NF & ICF/MR Cost Report Hospital Based Cost Report ICFMR CR Nursing Cost Report 	<ul style="list-style-type: none"> Accuracy of billing reports (e.g., count of errors in reporting) Amount of accounts receivable balances Cash flow Claims Error Rate Complaint rate (e.g., number of complaints decided in favor of covered person/total number of complaints received from covered persons) Eligibility Determination Percent Accuracy Rate Loss Ratio (e.g., incurred claims/total plan revenue) No. of Enrolled Providers Occurrence of payment adjustments Quality of care, procedures, and services to recipients Reversal Rate (e.g., reversed utilization review appeal) Staff time spent completing paper forms/records Staff turnover Worker productivity

3.2.5. Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMH/DD/SAS)

The mission of the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMH/DD/SAS) is to provide people with, or at risk of, mental illness, developmental disabilities, and substance abuse problems and their families the necessary prevention, intervention, treatment services, and supports they need to live successfully in communities of their choice.

Table 5 lists the high-level, core activities, and current state of process automation that DMH/DD/SAS faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 5 DMH/DD/SAS Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Admission Discharge/Transfer	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Active Treatment Global Queries • Acute Admissions Chart Tracking • Admissions Denial Database • Census Linc • Chart Tracking System • Data Card System - ADATC • Delinquent Record Assignment • Division S Med-Surg Admissions • Duke TeleProject Database • Hearts/SQL Reports • MedRec Database • Olmstead Consumer Outcome Database • Pat LOG5 • Patient Abuse Database • Patient Photo sheet • Patient Satisfaction Survey • Provider Link • PSI Scheduling Div A • SB859 (Crisis Diversion) Database • Transcription & Chart View • Treatment Episode Data System • WBJ Monthly Statistics <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
Bed Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Medicaid Report-Bed Days & DSH Tracking • Utilization Review System 	<ul style="list-style-type: none"> • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records

Core Activities	Current State of Process Automation	Quality and Performance Measures
Central Supply	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Cost Accounting System (DMH/DD/SAS) • Diet Cards & Label System • Food Purchase (FF Inv. Pro) • Inventory - Dental Office • Lab Inventory (FF Inv. Pro) • Pharmacy Inventory System • Warehouse Perpetual Inventory System <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
Appointment Scheduling	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Active Treatment Documentation and Scheduling System • Activity Therapy System • Adolescent Unit Active Treatment Documentation • Adult Acute Admission Active Treatment Documentation • ATD Dental Appointment Scheduling System • Client Evaluation Schedules • Clinic Consults Database • Clinic Scheduling • Dental Information • Dental Scheduling • Dental Tracking • Duke TeleProject Database • Geriatric Admissions Active Treatment Database • Maintenance Work Orders • Neuro Psychiatric Review • Olmstead Database • OmniRad • PSI Scheduling Div A • PSI Scheduling Div P • PSI Scheduling Div S • Psychiatric Rehabilitation Unit Active Treatment Documentation • QI Utilization Review • Riverbend School • Trips <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records

Core Activities	Current State of Process Automation	Quality and Performance Measures
Clinic Specialties	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Census Linc • Central Demographics • Client Database and HEARTS Interface • Clinic Consults Database • Clinic Scheduling • Clinic Tracking System • Dental Restraint • Dental Scheduling • Employee Health System (Umstead) • Medical Services <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>Currently, DMH/DD/SAS is short of information systems to support its clinical functions. The few clinical systems found are not able to capture clinical services provided in real-time and are not implemented statewide to all facilities.</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Transaction costs related to healthcare claims
Document Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Acute Admissions Chart Tracking • Chart Tracking System • Delinquent Record Assignment • Find Users • Transcription & Chart View <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
Equipment Maintenance	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • General Equipment Service Contracts • Maintenance Request Service Database 	<ul style="list-style-type: none"> • Nursing productivity • Quality of care, procedures, and services to patients
Patient Registration	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> • Automated using Healthcare Enterprise and Accounts Receivable Tracking System (HEARTS) 	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
Housekeeping/Laundry Management	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> • Nursing productivity • Quality of care, procedures, and services to patients

Core Activities	Current State of Process Automation	Quality and Performance Measures
Patient Dietary (Food and Nutrition)	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Cbord Diet Office • Cbord Menu Management System • Census and Nutrition Risk • Central Demographics • Daily Diet Sheet • Diet Cards & Label System • Diet Master • Diet Requisitions • Diet System/Dietary System • Dietary System • Dietman TOC DB • Food Purchase (FF Inv. Pro) • New Carddex • Nutrient • Patient Nutritional Assessment • RD Ward Assignments • Selected Employees and Nutritional Services Employees • Special Meals <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Healthy Eating Index (HEI), a measure of diet quality
Infection Control	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Central Demographics • Infection Control • Infections Control Program • Nosocomial Infection Reports <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims

Core Activities	Current State of Process Automation	Quality and Performance Measures
Medical Records Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Acute Admissions Chart Tracking • Adolescent Unit Active Treatment Documentation • Adult Acute Admission Active Treatment Documentation • Chart Tracking System • Client Goals • Client Information Database • Concurrent Review System • Deficiency Tracking • Delinquent Record Assignment • Division S Gero Patient Documentation Tracking • Error Tracking Database • Geriatric Admissions Active Treatment Database • HEARTS Information • MedRec Database • MR Document Tracking Form • NC Treatment Outcomes and Program Performance • Patflow • Physician Code List • Psychiatric Rehabilitation Unit Active Treatment Documentation • QAR • QRR • Transcription & Chart View • Transcription Tape System • Treatment Plan System • Utilization Review • Quadramed Affinity (HEARTS)(ADT/PA/UM/Medical Records/Healthnotes/QM/CMPI) <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
DMH/DD/SAS Information Systems Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • FIPP Computer Inventory • Information Systems Equipment Inventory • Information Systems Work Orders • MIS Infrastructure • MIS Inventory • MIS Requisitions • MIS Work Order System <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Worker productivity (e.g., time spent completing and processing paper forms/records) • Quality and accuracy of benefits and services delivered • Occurrences of fraud • Employee turnover • Federal/State penalties for noncompliance • Time to respond to external and internal changes (i.e., policies and regulations) • Cost of benefits and services delivery

Core Activities	Current State of Process Automation	Quality and Performance Measures
Hospital Administration	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Abuse / Neglect / Exploitation • CAPMR (Internal) • CAPMR Paid Claims (External) • Client Accident/Injury System • Delta Systems "ORCA" • Forced Meds • Forms Control • Healthcare Enterprise and Accounts Receivable Tracking System • House Bill 95 Database • Incident Report (DDH) • Incidents • Lab Billing System • Labbill • MC/Plus Pharmacy System • Medication Variance • Name Changes • Nurse Tracking (Dix) • Nursing Vacancy • Outpatient Billing • Patient Incident System • Patient Restraint and Seclusion • Pre-Home Model Assessment • QAR System • Residents Unit Evaluation System • Restraints • SB859 (Crisis Diversion) Database • Seclusion Restraint • Unusual Events Reporting System • UR Database • Work Order Tracking <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims • Amount of accounts receivable balances • Cash flow • Business office or billing staff turnover • Occurrence of payment adjustments • Accuracy of billing reports (e.g., count of errors in reporting)

Core Activities	Current State of Process Automation	Quality and Performance Measures
DMH/DD/SAS Human Resources Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • AAU Keys System • Absent Lakeside Staff • Advocacy Gather Program • Advocates Contact Information • Cardiopulmonary Resuscitation Tracking • Caswell VacTrac • Data Card System - HR • DHHS Internal EAP DB • Educational Leave • Employee Accident/Incidents • Employee Health System (Cherry) • Employee Health System (Iverson) • Employee Health System (Umstead) • Employee Locator • Employee Printer • Environment of Care Data • Environmental Services • Equity Analysis System (Caswell) • Holdover System • HR Database • Identification Badges • Immigrant Registry • Incidents (Employee) • Key/Lock Inventory • Latex Database • Licensing & Credentialing • mySQL • Name Changes • Nursing Staff • Nursing Staff Database • OBerry VacTrac • Outreach (JIRDC) • Outreach Implementation of PPS • Part-Time Training • Payroll • Personnel Management Information System (PMIS) Update Report • Plant Personnel • Professional Orientation • Projected Weekly Staffing • Protective Intervention Course Tracker • Rolodex (Caswell) • Selected Employees and Nutritional Services Employees 	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records

Core Activities	Current State of Process Automation	Quality and Performance Measures
Continued: DMH/DD/SAS Human Resources Management	Continued: <ul style="list-style-type: none"> • Sick Call Log • Staff Attendance/Census • Staff Data • Staff Development Reports • Staff Development System • Staff Development Training • Staff Development Training & Development System • Staff Development Training and Accreditation • Staff Directory • Staff Interest/Hobbies • Staff Tracking • Staff Training (Black Mtn) • Staff Training (Murdoch) • Staff Training and Development • Staff Vacancies • Staffing Pattern • State Service • Summit Personnel • Supervisory Training • TB Screening Database • Teaching Site Software • Temporary Registry • Time Keeping • Time Recording System • Timekeeping • Timekeeping & Payroll • Timekeeping System • Tracking Full-Time Trainers • Trainer I Completions • Trainer II Training • Training Unit Exits • VacTrac IV • Van Drivers • Videos • Workers Comp • Workers Comp Cost Tracking <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	Continued: <ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records

Core Activities	Current State of Process Automation	Quality and Performance Measures
DMH/DD/SAS Quality and Performance Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Aggregate Time Indicators • AP Performance Measures • Census and Nutrition Risk • Client Outcomes Inventory • DWI Services 508 Forms/Reports • Environmental Services • Licensing & Credentialing • Monthly Provider Monitoring Report • National Evaluation Child and Family Data • NC SNAP Look-behinds assigned • New Carddex • Occurrence Tracking System • Olmstead Consumer Outcome Database • ORYX • Patient Restraint and Seclusion • Patient Satisfaction Survey • Pre-Home Model Assessment • PRIV Plus • QI Utilization Review • Restraints • Special Friends • Trips • Utilization Review Cycles <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Accuracy of billing reports (e.g., count of errors in reporting) • Amount of accounts receivable balances • Business office or billing staff turnover • Cash flow • Costs incurred by diagnosis-related groups • Healthy Eating Index (HEI), a measure of diet quality • Nursing productivity • Occurrence of payment adjustments • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
DMHDDSAS Laboratory Information System	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Cost Accounting System (DMH/DD/SAS) • Clozaril System • Dynamic Premier Series Laboratory Information System • FastFax Plus • Lab Billing System • Lab Information System • Lab Information System (LabDaQ) • Lab Inventory (FF Inv. Pro) • Lab Requests • Lab System • Labbill • LabCorp • LabHex Laboratory Information System • Outpatient Billing • Quest Diagnostics • Star Lab <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims

Core Activities	Current State of Process Automation	Quality and Performance Measures
Nursing Support	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • 24 hour Nursing Report • Nurse Licensing • Nurse Tracking (Dix) • Nurses Tracking System • Nursing Staff • Nursing Staff Database • Nursing Vacancy <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Nursing productivity • Quality of care, procedures, and services to patients
Order Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Adaptive Equipment Inventory System • Adaptive Work Orders • Drug Enforcement Association Listing <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
Radiology Information System	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Canon Digital X-Ray Machine with Mgmt System • DENTOPIX • Medical Services • OmniRad • Radiology (Dix) • Radiology System (Broughton) • X-Ray System <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
Roster Management	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> • Nursing productivity • Quality of care, procedures, and services to patients
Wards Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • RD Ward Assignments 	<ul style="list-style-type: none"> • Costs incurred by diagnosis-related groups • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records

Core Activities	Current State of Process Automation	Quality and Performance Measures
Patient Relations	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Children's Unit Patient Information (CPI) Database • Client Accident/Injury System • Client Database • Client Database - PUB • Client Database and HEARTS Interface • Client Evaluation Schedules • Client Goals • Client Hearing Results • Client Information Database • Client Master Database • Client Outcomes Inventory • Client Payroll (Murdoch) • Client Rights / Appeals Database (Appeals/Complaints/Information & Referral /Investigations) • Dental Outpatient • Outpatient Billing • Patient Abuse Database • Patient Education Monographs • Patient Evaluations • Patient Guardian/Next of Kin Labels • Patient Incident System • Patient Library • Patient Locator • Patient Photo sheet • Patient Restraint and Seclusion • Patient Satisfaction Survey • Patient Tracking PC File • Patient Visitor Log • Residents Unit Evaluation System • Special Friends • Working Client Payroll • Working Patient Payment System • WRAO Patient Payroll <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records

Core Activities	Current State of Process Automation	Quality and Performance Measures
Treatment Planning and Execution	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Active Treatment Global Queries • Activity Therapy System • Adolescent Unit Active Treatment Documentation • Adult Acute Admission Active Treatment Documentation • Census Linc • Clinic Tracking System • Cost Accounting System (DMH/DD/SAS) • DMH Cost Finding System • Drug Education Schools (DES) 4401 Forms / Reports • DWI Services 508 Forms/Reports • Geriatric Admissions Active Treatment Database • Medical Treatment Plan Tool • MicroMedix CareNotes • Psychiatric Rehabilitation Unit Active Treatment Documentation • Substance Abuse Residential Treatment Data Base • Treatment Episode Data System • Treatment Plan for Rehab (Tx Plan) • Treatment Plan System • Treatment Planning • TXT Log <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Nursing productivity • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims
Pharmacy Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Clinical Pharmacology • Clozaril System • Controlled Substance Regulatory System • Cost Accounting System (DMH/DD/SAS) • Drug Regimen Review • Food-Drug Interactions Database • Narc Track • Pharmacy (Drug) Interventions • Pharmacy Inventory System <p>Some are homegrown, not secure, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Quality of care, procedures, and services to patients • Staff time spent completing paper forms/records • Transaction costs related to healthcare claims

3.2.6. Division of Public Health (DPH)

The mission of the Division of Public Health (DPH) is to promote and contribute to the highest level of health possible for the people of NC by....

- (1) Preventing health risks and disease;
- (2) Identifying and reducing health risks in the community;

- (3) Detecting, investigating, and preventing the spread of disease;
- (4) Promoting healthy lifestyles;
- (5) Promoting a safe and healthful environment;
- (6) Promoting the availability and accessibility of quality health care services through the private sector; and
- (7) Providing quality health care services when not otherwise available.

Table 6 lists the high-level, core activities, and current state of process automation that DPH faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 6 DPH Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Public Health Collaboration and Research	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Health Alert Network • NC GOLD (NETSS) • Occupational Surveillance • Sexually Transmitted Disease Management Information System • Tuberculosis Information Management System • Vaccine Manager 	<ul style="list-style-type: none"> • Indices of frequency (e.g., number of cases/deaths) • Population health statistics (e.g., quality-adjusted life years [QALYS]) • Costs associated with health-related event • Indices of health disparities
Public Health Protection and Prevention	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • HIV/AIDS Testing & Counseling System • Tuberculosis Information Management System 	<ul style="list-style-type: none"> • Indices of frequency (e.g., number of cases/deaths) • Population health statistics (e.g., quality-adjusted life years [QALYS]) • Indices of severity (e.g., number of days of disability, fatality ratio, hospitalization rates) • Costs associated with health-related event • Preventability (e.g., early detection, retarding progress of a condition) • Efficacy of clinical course (e.g., vaccinations) • Cost effective interventions (e.g., mortality, morbidity, disability, satisfaction with daily functioning, degree of absenteeism, employer/employee health-related costs) • Indices of health disparities
DPH Administration	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Health Services Information System (HSIS) • Lab Information Management System (LIMS) • HSIS - Women Infants & Children <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Worker productivity • Quality of care, procedures, and services to recipients • Staff time spent completing paper forms/records • Amount of accounts receivable balances • Cash flow • Staff turnover • Occurrence of payment adjustments • Accuracy of billing reports (e.g., count of errors in reporting)

Core Activities	Current State of Process Automation	Quality and Performance Measures
Public Health Education and Communication	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> • Health Alert Network 	<ul style="list-style-type: none"> • Indices of frequency (e.g., number of cases/deaths) • Population health statistics (e.g., quality-adjusted life years [QALYS]) • Indices of severity (e.g., number of days of disability, fatality ratio, hospitalization rates) • Costs associated with health-related event • Preventability (e.g., early detection, retarding progress of a condition) • Efficacy of clinical course (e.g., vaccinations) • Cost effective interventions (e.g., mortality, morbidity, disability, satisfaction with daily functioning, degree of absenteeism, employer/employee health-related costs) • Indices of health disparities
Public Health Human Resources Management	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes for managing personnel productivity, payroll, attendance, scheduling, growth and performance 	<ul style="list-style-type: none"> • Costs associated with health-related event • Indices of health disparities
Public Health Quality and Performance Management	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes for managing personnel productivity, payroll, attendance, scheduling, growth and performance 	<ul style="list-style-type: none"> • Accuracy of billing reports (e.g., count of errors in reporting) • Amount of accounts receivable balances • Cash flow • Cost effective interventions (e.g., mortality, morbidity, disability, satisfaction with daily functioning, degree of absenteeism, employer/employee health-related costs) • Costs associated with health-related event • Efficacy of clinical course (e.g., vaccinations) • Indices of frequency (e.g., number of cases/deaths) • Indices of health disparities • Indices of severity (e.g., number of days of disability, fatality ratio, hospitalization rates) • Occurrence of payment adjustments • Population health statistics (e.g., quality-adjusted life years [QALYS]) • Preventability (e.g., early detection, retarding progress of a condition) • Quality of care, procedures, and services to recipients • Staff time spent completing paper forms/records • Staff turnover • Worker productivity

Core Activities	Current State of Process Automation	Quality and Performance Measures
Public Health Surveillance and Monitoring	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Behavioral Risk Factors Surveillance System • Birth Defects Monitoring Program • CareWare • EPI INFO (DPH) • Genetic Counseling Program • Health Services Information System • HIV/AIDS Testing & Counseling System • Medical Examiners Information System • NC GOLD (NETSS) • Newborn Hearing Screening Data Tracking & Surveillance System • North Carolina Hospital Emergency Surveillance System • Occupational Surveillance • Sexually Transmitted Disease Management Information System • Sickle Cell Program • Tuberculosis Information Management System • Vital Records Birth Certification System • Vital Records Birth Index System • Vital Records/Accounting System • Vital Records/Adoptions & Legitimations • Vital Records/Births • Vital Records/Births/RVB • Vital Records/Deaths • Vital Records/Delayed Births • Vital Records/Divorces • Vital Records/Fetals • Vital Records/Marriage/Divorces • Vital Records/Marriages • Water Supply Records <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Indices of frequency (e.g., number of cases/deaths) • Population health statistics (e.g., quality-adjusted life years [QALYS]) • Indices of severity (e.g., number of days of disability, fatality ratio, hospitalization rates) • Costs associated with health-related event • Preventability (e.g., early detection, retarding progress of a condition) • Cost effective interventions (e.g., mortality, morbidity, disability, satisfaction with daily functioning, degree of absenteeism, employer/employee health-related costs)

Core Activities	Current State of Process Automation	Quality and Performance Measures
Public Health Services Assistance	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Birth Defects Monitoring Program • Genetic Counseling Program • Hearing Link • HSIS - Adult Health, Breast, Cervical Cancer Prevention Program/Wise Women • HSIS - Child Health • HSIS - Children Services Coordination Program • HSIS - Family Planning • HSIS - Maternal Health • Infant-Toddler Database • Lab Information Management System (LIMS) • Newborn Hearing Screening Data Tracking & Surveillance System • Special Nutrition Programs (Child Nutrition) • Women, Infants and Children System (WIC) <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>Currently, LIMS is not compliant with Federal guidelines and standards for the Public Health Information Network (PHIN). Additionally, HSIS does not have the capacity to handle increasing demand, allow for illimitable information sharing, or provide a comprehensive view of patients for DPH and local health departments. Finally, the current WIC System does not meet Federal functional requirements of the US Department of Agriculture (USDA).</p>	<ul style="list-style-type: none"> • Occurrence of payment adjustments

3.2.7. Division of Social Services (DSS)

The mission of the Division of Social Services (DSS) is to provide family-centered services to children and families to achieve well-being through ensuring self-sufficiency, support, safety, and permanency.

Table 7 lists the high-level, core activities, and current state of process automation that DSS faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 7 DSS Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Child and Family Reception, Assessment, and Intake	<p>The following application is known to address this core activity:</p> <ul style="list-style-type: none"> • Multiple Response System (MRS) 	<ul style="list-style-type: none"> • Accuracy of county reimbursement reports (e.g., count of errors in reporting) • Case and social worker productivity (e.g., time spent completing and processing paper forms/records)

Core Activities	Current State of Process Automation	Quality and Performance Measures
Child and Family Eligibility and Application	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Criminal Background Check System • Crisis Intervention Program • Eligibility Information System (EIS) • Food Stamp Information System (FIS) • Hearings and Appeals Tracking System • Multiple Response System (MRS) • Social Services Quality Control Sampling System (FSIS) <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Case and social worker productivity (e.g., time spent completing and processing paper forms/records) • Accuracy of benefits payments • Occurrences of fraud
Child and Family Case Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • ACTS Web Site • Automated Collection and Tracking System (ACTS) • Care Plan System • Multiple Response System (MRS) • Disinterested Public Agent Guardians - DPAG Bond (Blanket Bonds) <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Case and social worker productivity (e.g., time spent completing and processing paper forms/records) • Indices of frequency (e.g., number of child deaths) • Preventability (e.g., early detection, retarding progress of a situation) • Accuracy of benefits payments • Occurrences of fraud
Child and Family Benefits and Services Delivery	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • 1571 Transfer Program - County Administration Reimbursement System • Central Registry Fatalities • Common Name Data Services • County Administration Reimbursement System • County Administration Reimbursement System • Crisis Intervention Program • Daysheets/County Administration Cost Interface • Decision Support Information System (Client Services Data Warehouse) • Electronic Benefits Transfer Interface System • Employment Programs Information System • Foster Care Facility Licensing • Life Line (aka Telephone Waiver) • Low Income Housing Energy Assistance Program • Multiple Response System (MRS) • Refugee Information System • Services Information System <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p>	<ul style="list-style-type: none"> • Case and social worker productivity (e.g., time spent completing and processing paper forms/records) • Indices of frequency (e.g., number of child deaths) • Accuracy of benefits payments • Occurrences of fraud

Core Activities	Current State of Process Automation	Quality and Performance Measures
DSS Human Resources Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Leave System • Staff Database • Staff Training and Development System 	<ul style="list-style-type: none"> • Case and social worker productivity (e.g., time spent completing and processing paper forms/records) • Indices of frequency (e.g., number of child deaths) • Preventability (e.g., early detection, retarding progress of a situation) • Accuracy of benefits payments • Occurrences of fraud
DSS Quality and Performance Management	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Automated Collection and Tracking System (ACTS) 	<ul style="list-style-type: none"> • Accuracy of benefits payments • Accuracy of reimbursement reports (e.g., count of errors in reporting) • Amount of accounts payable balances • Case and social worker productivity (e.g., time spent completing and processing paper forms/records) • Cash flow • Indices of frequency (e.g., number of child deaths) • Occurrence of payment adjustments • Occurrences of fraud • Preventability (e.g., early detection, retarding progress of a situation) • Quality of care, procedures, and services to recipients • Staff time spent completing paper forms/records • Staff turnover • Worker productivity
Social Services Policy and Regulatory Enforcement	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Audit Trail CNDS • Automated Collection and Tracking System (ACTS) • Child Support Enforcement Training Web Site • Hearings and Appeals Tracking System • IV-D Correspondence System • Professional License Revocation • Public Records Law Database (System) <p>Some are technically obsolete, costly to maintain and or operate, and/or use declining or irreplaceable skills</p> <p>In addition, the current release of ACTS, does not allow Child Support Enforcement workers to customize, and regenerate legal documents that meet the requirements of local judicial districts. What's more, ACTS does not implement the Federal electronic income withholding process, which would enable DSS to get child support to families faster.</p>	<ul style="list-style-type: none"> • Indices of frequency (e.g., number of child deaths) • Preventability (e.g., early detection, retarding progress of a situation) • Occurrences of fraud

Core Activities	Current State of Process Automation	Quality and Performance Measures
Social Services Education and Communication	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Employment Programs Information System (EPIS) <p>Some are technically obsolete, costly to maintain and/or operate, and/or use declining or irreplaceable skills</p> <p>In addition, NCGS131D-10.6a requires the State to provide 72 hours of training prior to social workers assuming casework responsibilities. DSS is not currently equipped to handle this Statewide, ongoing training requirement.</p>	<ul style="list-style-type: none"> • Indices of frequency (e.g., number of child deaths) • Preventability (e.g., early detection, retarding progress of a situation) • Quality of care, procedures, and services to recipients
Child Protection and Abuse Prevention	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> • Case and social worker productivity (e.g., time spent completing and processing paper forms/records) • Indices of frequency (e.g., number of child deaths) • Preventability (e.g., early detection, retarding progress of a situation) • Occurrences of fraud
Social Services Collaboration	<p>No application is known to address this core activity:</p> <ul style="list-style-type: none"> • Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> • Case and social worker productivity (e.g., time spent completing and processing paper forms/records) • Indices of frequency (e.g., number of child deaths) • Preventability (e.g., early detection, retarding progress of a situation) • Accuracy of benefits payments • Occurrences of fraud

3.2.8. Office of Education Services (OES)

The mission of the Office of Education Services (OES) is to provide quality, comprehensive, developmental and educational opportunities for eligible students ages birth to twenty-one and their families so that students can develop the skills necessary to lead productive lives—vocationally, socially, and personally—resulting ultimately in the achievement of their highest potential for independent and successful lives.

Table 8 lists the high-level, core activities, and current state of process automation that OES faces in the execution of its mission, as well as the quality and performance measures that NC DHHS could improve with technology enhancements.

Table 8 OES Core Activities, Current State of Process Automation, & Quality and Performance Measures

Core Activities	Current State of Process Automation	Quality and Performance Measures
Education Services Training and Communication	<p>The following applications are known to address this core activity:</p> <ul style="list-style-type: none"> • Governor Morehead School Web Site • Office of Education Services Website 	<ul style="list-style-type: none"> • No. of teachers trained • Percentage of students completing their individual education plan • Number of graduates who attend a post secondary institution

Core Activities	Current State of Process Automation	Quality and Performance Measures
Education Services Collaboration and Research	No application is known to address this core activity: <ul style="list-style-type: none"> Time- and paper-intensive, manual processes 	<ul style="list-style-type: none"> No. of teachers trained Percentage of classes that do not meet the class size standard Percentage of students who graduate Percentage of students completing their individual education plan Number of graduates who attend a post secondary institution
OES Human Resources Management	The following application is known to address this core activity: <ul style="list-style-type: none"> Western NC School for the Deaf Information 	<ul style="list-style-type: none"> No. of teachers trained Percentage of classes that do not meet the class size standard

3.2.9. Summary of Divisional Challenges

Taken as a whole, the divisional challenges expose the following business requirements:

- NC DHHS needs to protect the privacy and security of health information; prevent medical and administrative mistakes; and lower administrative health care costs by reducing the amount of paper medical and health records
- NC DHHS needs to leverage resources to achieve operational efficiencies by streamlining business processes; implementing process improvements prior to automation; enhancing access and transparency of information; identifying opportunities for cost avoidance, savings, and recovery; and ensuring the continuity, reliability, and security of data and support systems
- NC DHHS needs to enhance internal and external communications and marketing efforts to continue its focus on customer service by: analyzing complaints and call center data to shorten response times and improve programs and services; applying technology and best business practices to improve the ways in which we collect, share, analyze and use information from stakeholders and consumers; targeting messages to the public about DHHS programs and services and their impact on the quality of life in North Carolina; and supporting the tools, processes, and resources necessary to inform and connect a large, diverse and geographically dispersed workforce
- Improve health emergency preparedness and response through enhanced information and communication systems

These and the requirements exposed on examination of the enterprise-level challenges, are the business drivers that NC DHHS must address immediately during the July 1, 2007 through June 30, 2010 period.

4. Major Technology Strategies for Preferred Future Environment

This section provides the technology goals, objectives, and strategies aimed to address the enterprise and divisional business challenges and requirements discussed in *Section 3*.

4.1. Goal: Standardize Design and Delivery of IT for DMH/DD/SAS

Objective(s)	Strategies
Automate the Central Regional Psychiatric Hospital (Butner) by June 30, 2009	<ul style="list-style-type: none"> ▪ Implement the IT infrastructure for the new Butner Hospital ▪ Consolidate multiple clinical and administrative applications into an integrated solution that meets all DMH/DD/SAS requirements ▪ Enable new DMH/DD/SAS solution deployed in the Butner Hospital to interface with existing Healthcare Enterprise and Accounts Receivable Tracking System (HEARTS) to enable billing and executing electronic healthcare claims ▪ Enable the new DMH/DD/SAS solution employed at the Butner Hospital to interface with applications operated by the local management entities (LMEs) to support collaboration, data sharing, and referrals ▪ Enable electronic health records (EHR) at the Butner Hospital
Automate new Cherry Hospital	<ul style="list-style-type: none"> ▪ Implement the IT infrastructure for the new Cherry Hospital ▪ Implement a the new DMH/DD/SAS solution at Cherry Hospital ▪ Enable new DMH/DD/SAS solution at Cherry Hospital to interface with existing Healthcare Enterprise and Accounts Receivable Tracking System (HEARTS) to enable billing and executing electronic healthcare claims ▪ Enable the new DMH/DD/SAS solution at Cherry Hospital to interface with applications operated by the local management entities (LMEs) to support collaboration, data sharing, and referrals ▪ Enable electronic health records (EHR) at Cherry Hospital

Objective(s)	Strategies
Automate new Broughton Hospital	<ul style="list-style-type: none"> ▪ Implement the IT infrastructure for the new Broughton Hospital ▪ Implement a the new DMH/DD/SAS solution at Broughton Hospital ▪ Enable new DMH/DD/SAS solution at Broughton Hospital to interface with existing Healthcare Enterprise and Accounts Receivable Tracking System (HEARTS) to enable billing and executing electronic healthcare claims ▪ Enable the new DMH/DD/SAS solution at Broughton Hospital to interface with applications operated by the local management entities (LMEs) to support collaboration, data sharing, and referrals ▪ Enable electronic health records (EHR) at Broughton Hospital

4.2. Goal: Modernize Current IT Environment

Objective(s)	Strategies
Modernize enterprise and critical divisional infrastructure by June 30, 2009, ensuring that all related technologies are supported by appropriate maintenance agreements and deployed following consistent standards	<ul style="list-style-type: none"> ▪ Replace end-of-life, enterprise equipment managed by DIRM for NC DHHS ▪ Replace critical end-of-life equipment deployed Department-wide ▪ Enable workers in the field to access data from remote locations ▪ Implement a scanning solution to convert hard copy documents into electronic documents which can integrate into an electronic enterprise document management solution provided by ITS (EDM) ▪ Implement Telemedicine at the Governor Morehead School (GMS) for the Blind ▪ Replace County Server(s) for Child Support ▪ Build new infrastructure for new State Public Health Lab

Objective(s)	Strategies
Modernize routine applications by June 30, 2010	<ul style="list-style-type: none"> ▪ Enable the new Health Information System (HIS) to interface with a new Laboratory Information Management System (LIMS) to enable laboratory testing, communication of results, and Medicaid billing ▪ Enhance the existing ACTS to improve the automatic generation of legal documents, improve website customer service tracking, redesign employer remittance documents to assist employers, implement the Federal electronic income withholding initiative, and other Federally mandated modifications ▪ Implement a Disease Event Tracking and Epidemiological Collection Tool (DETECT) to enhance public health surveillance utilizing data from a variety of existing sources including hospitals, poison control center, emergency medical services, and veterinary medicine ▪ Implement a new automated system for vital records to improve the birth and death registration processes, comply with new federal requirements, and enable a new data set for birth certificates. ▪ Implement a seamless, integrated automated system for health services that meets the business needs of DPH service providers and management ▪ Participate in national Electronic Disease Surveillance System (EDSS) to electronically report diseases and conditions of public health significance ▪ Participate in the BEACON Project, which is managed by the NC Office of the State Controller. The aim of the BEACON Project is to implement a comprehensive HR/Payroll System. ▪ Replace an existing system for laboratory information management (LIMS) and reporting to improve data exchange and streamline workflows ▪ Replace the existing system for the Women, Infants, and Children Program (WIC) with a new modern system that meets current USDA functional requirements, supports Staff that oversee the WIC program, and enable State and local workers to respond to policy changes in a timely manner.

Objective(s)	Strategies
Modernize the Medicaid Management Information System (MMIS) by December 31, 2009 to support the missions of DMA, DMH/DD/SAS, DFS, and DPH	<ul style="list-style-type: none"> ▪ Improve and streamline the prior approval/authorization (PA) processes for Medicaid providers by developing a web-based prior approval application ▪ Implement a new Medicaid Management Information System that will facilitate a multi-payer strategy across health care services provided by NC DHHS

4.3. Goal: Improve IT Operations and Management

Objective(s)	Strategies
Improve IT Management Methods by June 30, 2009	<ul style="list-style-type: none"> ▪ Establish an IT Governance Committee (refer to Appendix 6.4) that will be responsible for the following: <ul style="list-style-type: none"> ○ Determine and consistently apply criteria for prioritizing and deciding on IT investments across NC DHHS ○ Facilitate, when applicable, the approval of DHHS' IT projects by the Office of State Budget and Management (OSBM) and the State Chief Information Officer (SCIO) ○ Develop and maintain a forum for sharing responsibility and ownership of actions and end results surrounding IT investments across NC DHHS divisions, offices and facilities ○ Look for opportunities to consolidate and/or benefit from enterprise, multi-divisional, or statewide solutions ○ Review and approve significant resource, scope and/or schedule changes to IT initiatives ▪ Implement a tool for performance management, activity monitoring and decision support ▪ Develop and implement an Enterprise, Service-oriented, IT Architecture ▪ Establish an Educational Media Specialist (EMS) position in OES that will be responsible for instructional design centered on education technology ▪ Complete Human Resources Migration Plan to meet State rules surrounding the use of supplemental staffing for IT ▪ Consolidate common NC DHHS IT services and resources

Objective(s)	Strategies
	<ul style="list-style-type: none"> ▪ Restructure DIRM to enhance delivery of IT products and services, enable enterprise, service-oriented architecture approach, and consolidation ▪ Inventory NC DHHS IT assets toward the eventual use of the IT Asset Management service offered by NC ITS
Improve IT Policies and Standards by June 30, 2010	<ul style="list-style-type: none"> ▪ Complete the DIRM Security Project ▪ Update Department policies for IT
Improve IT Procedures by June 30, 2010	<ul style="list-style-type: none"> ▪ Implement best practices for Incident & Problem Management ▪ Implement best practices for Change, Release and Configuration Management ▪ Implement best practices for Service Level and Financial Management ▪ Implement best practices for Capacity, IT Service Continuity, and Availability Management

4.4. Goal: Comply with Regulations and Rules

Objective(s)	Strategies
Be in compliance with all currently published rules and regulations of HIPAA Administrative Simplification by February 15, 2008	<ul style="list-style-type: none"> ▪ Complete the DHHS Security Project
Comply with changing State and Federal rules ongoing	<ul style="list-style-type: none"> ▪ Continue adaptive maintenance on existing applications as required by State and Federal rules and regulations

4.5. Goal: Enhance Transparency of and Access to Programs and Services

Objective(s)	Strategies
Enhance Web Services by June 30, 2010	<ul style="list-style-type: none"> ▪ In response to NCGS131D-10.6a, develop and implement on-line learning for child welfare social workers and foster and adoptive parents. ▪ Redesign DHHS Web sites to enable information access based on clients' view ▪ Initiate video conferencing and web casting services
Implement the North Carolina Families Accessing Services Through Technology (NC FAST) System by June 30, 2013 to support case management, performance management, benefits and services delivery, eligibility determination, collaboration and other related activities of DAAS, DCD, DMA, and DSS	<ul style="list-style-type: none"> ▪ Procure an automated system that will provide case and social workers with the ability to perform the following: <ul style="list-style-type: none"> ○ Share case information across counties ○ Monitor services and track cases ○ Evaluate client abilities, skills, and unmet needs ○ Apply program rules to determine which programs clients are eligible to receive ○ Manage, record, and track service and benefit plans, as well as measure progress against and results of such plans ○ Investigate and manage fraud and abuse claims ○ Document and manage benefits received ○ Document all interactions between clients and the departments of social and human services ○ Maintain and update information about providers of health and human services ○ Track case and social worker productivity and manage schedules ○ Communicate program changes, including eligibility criteria ▪ Implement the selected NC FAST solution

5. Summary of Three-year Technology Plan

Figure 1 illustrates the overall NC DHHS Technology Plan at a high-level.

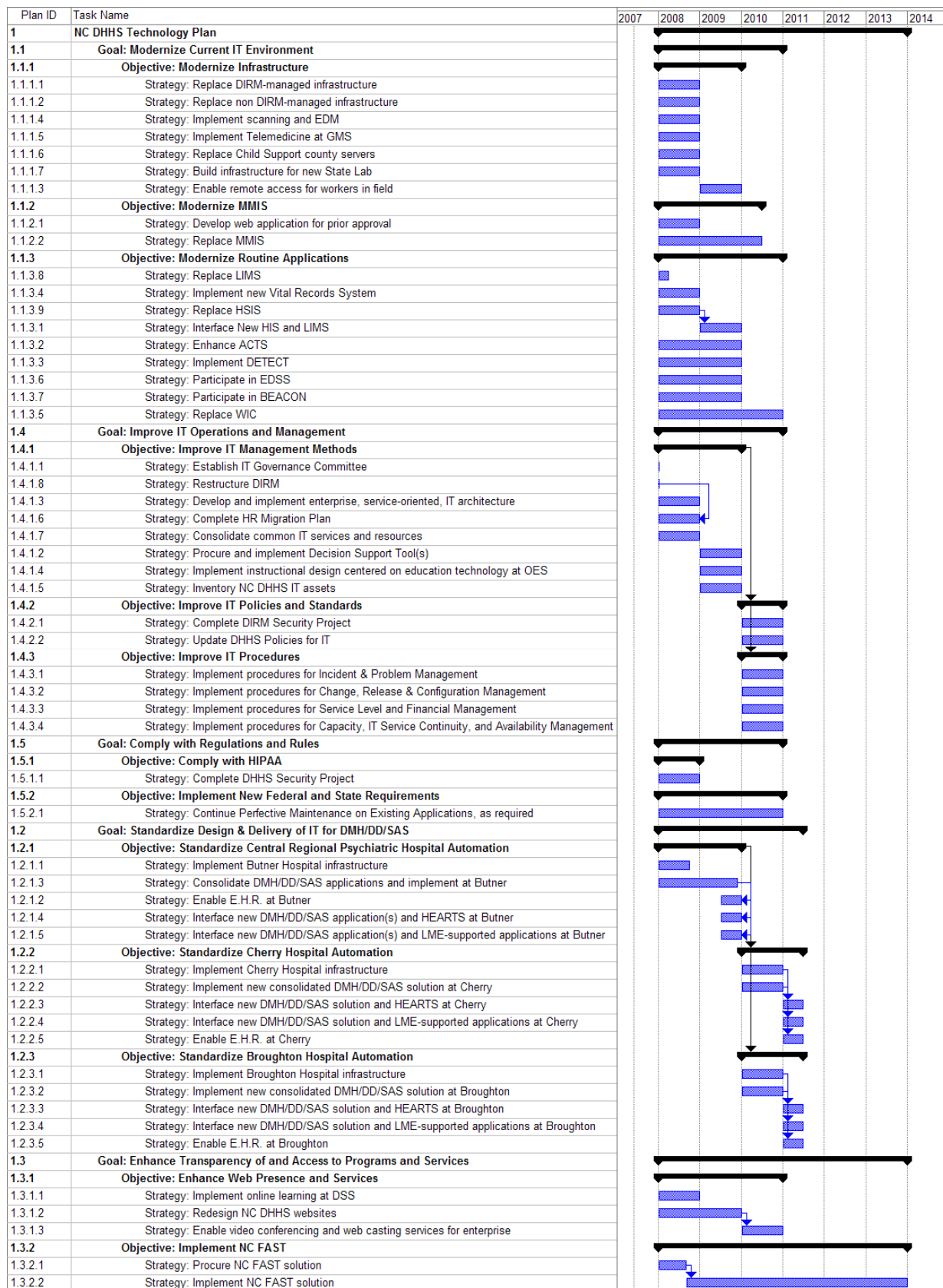
5.1. Critical Success Factors

Those few areas where things must go right for NC DHHS to be considered successful in achieving the goals of this *Technology Plan* are...

- Obtaining project and budget approvals from State leaders and Federal partners
- Securing personnel resources with the know-how and competencies to fulfill the strategies
- Forming and maintaining the necessary internal and external strategic relationships with partners
- Gaining customer acceptance of outcomes
- Sustaining outcomes after implementation

NC DHHS looks forward to working with the recipients of this *Technology Plan*, as it moves forward to fulfill the goals discussed herein.

Figure 1 High-level View of NC DHHS Technology Plan



Appendices

5.2. Terms and Definitions¹

Term	Definition
Adaptation	See: Maintenance (Adaptive)
Application	A set of software that provides functionality to the business process or is necessary to operate and maintain the automated information systems
Application architecture	The model(s) that describes how a set of applications will be structured and the interfaces and design rules for each of its parts (e.g., isolating graphical user interface code from business logic).
Application platform	A collection of tightly integrated computing hardware, peripherals, operating system, and middleware upon which an application is built. The application provides some of its functionality by accessing services residing on the application platform through an Application Program Interface.
Application platform entity	The set of resources, including hardware and software that provides all the services to application software executing on that platform, including the ability to have application-to-application services
Application portfolio	The aggregation of applications required to support the Department.
Application Service Provider	Organizations that provide application programs or services for a fee over the Internet. These programs or services were previously made available from the Enterprise's server or personal computers.
Automated information system (AIS)	A combination of computer hardware and software, data, and telecommunications that performs functions for an organization
Baseline	A set of items that have been formally reviewed and agreed upon; the agreement is between key stakeholders, such as the item's producer and consumer (user). A baseline establishes a fixed point for further development or use. Items in a baseline can be modified only through formal change control procedures in which the stakeholders participate.
Baseline data	Initial collection of data to establish a basis for comparison
BCP	Business Continuity Plan
Benchmark	A standard or point of reference used in measuring and/or judging quality or value. (National Performance Review)
Business	Any Enterprise that provides a type of offering; the organizational entity being studied, regardless of its size or purpose or focus on either private or public sector
Business process	A set of interacting activities and decisions that produce one or more products or services for customers of the business Enterprise
Business process reengineering	The significant redesign and restructuring of an organization's business operations and management practices to achieve a significant change in performance, such as cost, cycle time, service, and quality; traditional organizational boundaries are eliminated and replaced by an emphasis on core business processes.
Business rule	An expression of the business policies and procedures (e.g., Agency or Program), often embedded within the logic of an application program
Capacity	A measure of an organization's output, for example participation rates in a Program or other Federal reporting requirements. For the IT organization, this may resolve into measures of efficiency or effectiveness of meeting IT evolving needs.

¹ Universal terms and definitions extracted from the *Glossary of the IT Planning and Management Guides*, National Human Services IT Resource Center (NHSITRC), Administration for Children & Families (ACF), US Department of Health and Human Services.

Term	Definition
CIO	Chief Information Officer
CMM	Capability Maturity Model
CNDS	Common Name Database Services
Committed Dependency	Reliance that may result in complete failure of the receiving project
Component	A software item that can be independently developed, distributed (provided and/or sold), and used in its binary form separable from the original context. Components can be used to develop distributed applications in which the components can communicate with one another. A component is based on a component model, such as COM or JavaBeans. Component models support runtime interface exposure and discovery, component properties, persistence, event handling, application builder support, distribution (location transparency), and component packaging. Components have two distinct parts: specifications (or interfaces) and implementations. Components are typically generated with object-oriented approaches, but this is not essential, as long as they can be used as objects.
Core competency	A bundle of skill sets or capabilities that significantly contribute to an organization's ability to satisfy the customer, offer unique services, or have future value.
Core process	The fundamental activities or group of activities, so critical to an organization's success that failure to perform them in an exemplary manner will result in deterioration of the organization's mission
COTS	Commercial Off-the-Shelf
Critical Dependency	Reliance that may result in the partial or complete failure of not only the receiving project but also its mission, related systems, structures, or projects
Critical success factors	Those few areas where things must go right for the Enterprise to be considered successful in achieving its mission; CSFs are internal and external states and events that can have significant impact on perceived results.
CSDW	Client Services Data Warehouse
CTO	Chief Technology Officer
Cultural filter	A concept that describes how one delivers, views, or interprets information in different regions; for instance, telephone interviews or face-to-face interviews may be necessary given the interviewee's circumstances.
Culture	The sum of individual opinions, shared mindsets, values, and norms
Data	Information absent its context; a representation of facts, concepts, and instructions in a defined format and structure that permits the processing of interpretation by humans or machines
DDS	Disability Determination Services
DHHS	Department of Health and Human Services
EDM	Electronic Document Management
EHR	Electronic Health Record
Enterprise	The whole (or portion) of the State Department (or additional Agencies) that is affected by change in the IT infrastructure. This scope is necessary to establish the boundaries, within which the Department decision makers can manage the interoperability and integration within and across this boundary.
Enterprise application integration	The application of technology to consolidate and coordinate disparate legacy applications and databases to extend their useful lifetime across the enterprise; the interoperability generally relies on message-oriented middleware with adaptors and or connectors that allow existing applications to interact by moving, routing, and transforming data between them in real time.

Term	Definition
Entity	A discrete, identifiable element of technology; an entity may be made up of subsidiary entities and may be part of a larger entity. As an element of technology, an entity is a "thing"; and can be characterized in part by the technology used to implement it. For example, a candle and a light bulb are both implementations of a "light source" entity.
Environment	Circumstances and conditions that interact with and affect an organization; these can include economic, political, cultural, and physical conditions inside or outside of the organization. (National Performance Review)
EPICS	Enterprise Program Integrity Control System
EPMO	Enterprise Project Management Office
FSIS	Food Stamp Information System
Function (business)	A collection of resources (equipment, networking, individuals) in a single area of operations, such as finance, accounting, personnel, production, engineering, operations, development, or support.
Goal	A general target the Department or organization wishes to reach in a specific area. It is a broad direction for managerial decision-making, often stated in terms of qualitative measures. Goals need to be achieved for the Department or organization to achieve its mission.
Guiding principles	The shared values and management or technical style of the Enterprise; they articulate the ethical standards by which the organization makes decisions and conducts activities.
HEARTS	Healthcare Enterprise and Accounts Receivable Tracking System
HIPAA	Health Insurance Portability and Accountability Act of 1996
Information	Data that has been given meaning by human reference; data becomes information only when it is placed into a meaningful context or relationship.
Information appliance	Combines the application software and application platform entities into one entity This term is used when the presence of configurable and/or separately procurable software is not visible to the user of a particular information technology. Examples: set-top cable TV boxes, videocassette recorders, television sets, fax machines, cell phones.
Information technology	The processing equipment, interconnecting (networking) equipment, and the software entities that operate within this equipment
Integration	Combining separately developed parts into a whole so that they work together. The means of integration may vary, from simply mating the parts together at an interface, to radically altering the parts or providing something to mediate between them.
Interface	A boundary between two or more entities such as human-computer or application program to application
Interoperability	The ability of independently developed and fielded applications that execute on heterogeneous computer platforms to communicate with one another and to exchange and use information (content, format, and semantics)
IOSM	Infrastructure, Operations, and Systems Management
IPRS	Integrated Payment and Reporting System
ITIL	Information Technology Infrastructure Library
ITS	Office of Information Technology Services
Legacy system	Jargon for an AIS (or set of applications) that is currently in use, and initially deployed many years ago, using a computing infrastructure that is several generations old. These systems tend to be critical to the business and cannot be easily replaced or cost-effectively maintained. They are approaching or have reached the end of their practical operational life span.
LIEAP	Low-Income Energy Assistance Program

Term	Definition
Maintenance	The process of modifying a system or component after delivery to correct faults, improve performance or other attributes, or adapt to a changed environment, with the purpose of maintaining the value of the existing system.
Maintenance (adaptive)	Maintenance performed to make a system usable in a changing environment. Adaptation refers to evolutionary changes (usually involves a progressive modification of some structure or structures), which a system makes in order to cope with the changes in the environment, while still keeping the essential attributes of the system's structure and processes constant. For example: responding to increased enrollment by hiring more teachers; adjusting the clothing to suit the weather
Maintenance (Corrective)	Maintenance performed to correct faults (defects) in hardware or software.
Maintenance (perfective)	Maintenance performed to improve the performance, maintainability, or other attributes of a system.
Measure	One of several measurable values that contribute to the understanding and quantification of a key performance indicator
Metrics	The elements of a measurement system consisting of key performance indicators, measures, and measurement methodologies
Migration	The process of transferring all or part of AIS's functionality, data, or communications to another technical infrastructure; the original application code may be ported or replaced. The business data (and its schema) is usually retained in a significant way.
Mission	An enduring statement of purpose; the organization's reason for existence; the mission describes what the organization does, who it does it for, and how it does it. (National Performance Review)
MMIS	Medicaid Management Information System
NC	North Carolina
NC FAST	NC Families Accessing Services through Technology
Noncompliance	An instance where performance of a task or a resultant work product does not follow the agreed upon procedures, descriptions, standards, or other requirements; a noncompliance is generally found through QA reviews and audits and formally tracked until it is resolved.
Objective	A broad, general direction or intent
Open Dependency	Reliance that may result in partial failure to the receiving project
Open system (environment)	An AIS that is built to a set of specifications that are nonproprietary, allowing the system to better interoperate, scale, or allow for porting of applications across heterogeneous, multi-vendor computing platforms.
Organization	A logical grouping of people and resources (including information) for accomplishing some aspect of the mission of an Enterprise
OSBM	Office of State Budget and Management
Packaged solution	An integrated collection of software, hardware, or other parts provided by vendors as a basis for developing solutions to common business domain functions; a packaged solution is often highly tailorable at the design level to meet Enterprise-unique needs. Systems transferred from one State and adapted for another are in this category.
Performance measure	A quantitative or qualitative characterization of performance (National Performance Review)

Term	Definition
Plateau (evolution planning)	An incremental level of capability at which the Department operates, as it moves to achieve its vision in accordance with the strategy; it is a point where the Department can reevaluate the progress being made; note significant changes in the Department's external, internal, or IT Division conditions; and readjust plans. Plateaus can be represented in the IT Evolution Plan as intermediate milestones.
Platform	See: Application platform
Plug-in	A program that can be downloaded and installed on demand to be used as part of a Web browser; a plug-in is generally a small program that is activated by the Web browser to perform special processing of objects within the HTML document, such as viewing Portable Document Format (PDF) or streaming video objects.
Portability (porting)	Portability is a characteristic of a system (or part) that describes the ease with which the system (or part) can run on multiple, heterogeneous platforms. There are two general levels of portability: the binary-program level and the source-code level. Binary portability is exemplified by the Java language, whose byte codes are capable of executing on any computer that supports its runtime environment (Java Virtual Machine). Source code portability is generally achieved by coding to a recognized standard (e.g., ANSI C++) and APIs to facilitate program compilation in multiple target environments.
Portal	A (Web) application that provides a single means of access to many information sources and applications; portals typically provide personalization, collaboration, content management, security, and other services to users. A portal may serve one or more types of users within or across Department boundaries, such as clients, caseworkers, or service providers.
Process	A sequence of activities that transforms or uses inputs to produce outputs.
Profile	A profile is a collection of specifications developed to meet a set of requirements. Elements of a profile may consist of either formal standards (i.e., those developed within a voluntary standards organization such as ANSI or IEEE) or de facto standards (i.e., those accepted within the marketplace). Each element of a profile may be a specification in its entirety or a specification with certain options or parameters to be chosen. The NIST APP organizes the standards into several services areas: Operating System, Human Computer Interface, Software Engineering, Data Management, Data Interchange, Graphics, and Network Services.
Project	An effort, directed toward achieving a specific goal that has been assigned specific resources and duration. Projects are the context in which all development work is done for a program.
Quality assurance	A planned and systematic set of actions to provide adequate confidence that work products and the processes used to produce them conform to established requirements.
Reengineering	The examination of a system to extract inherent knowledge and functionality followed by the implementation of equivalent capability in a new system; the new implementation may include modifications for changed requirements not part of the original system. Also known as renovation and reclamation
Resource	That which is used or consumed by the Enterprise in fulfillment of its objectives
Restructuring	A process to reorganize a system in another form, preserving the original system's external behavior (functional and semantics)
Return on investment (IT)	The gains achieved from spending on IT for the Department.
Reverse engineering	The examination of a system to extract inherent knowledge and functionality with the express purpose of creating an abstract model or specification of the system (does not involve changing the subject system).
RFP	Request for Proposal
RIS	Refugee Information System

Term	Definition
Role	A unit of defined responsibility that may be assumed by one or more individuals (e.g., a team that fulfills the planner responsibilities)
Scalable	A scalable application system is one that can increase its throughput without significantly increasing its cost per user (or cost per transaction). The system should also be able to scale down as well.
Service	A capability that a provider entity makes available to a user entity at the interface between those entities (e.g., a Web service)
SFY	State Fiscal Year
SSA	Social Security Administration
STA	Statewide Technical Architecture
Standard	A special case, or type of specification, that has been through a formal ballot in a group open to wide participation, and have a known community of consensus. These formal standards may be considered U.S. national standards.
Standard (de facto)	A proprietary specification that becomes widely adopted in the marketplace based on marketplace success, made available by the developer of the technology in a public or private domain (e.g., for a fee).
Standard (formal)	Standards that have been agree upon by a group open to wide participation. These standards have been through a defined balloting process.
Standard (international)	A standard developed and successfully balloted outside the U.S., using an approach that may vary greatly from the U.S. approach. The scope of ballot is global (e.g., ISO/IEC).
Standard (private or proprietary)	Specification developed within an organization; may be protected by intellectual property restrictions or agreement prior to use.
Standard (public)	Any specification that has established some consensus but has not been formally balloted; usually a proprietary specification that became widely adopted in the marketplace.
Standard (regional)	A standard developed and successfully balloted outside the U.S., using an approach that may vary greatly from the U.S. approach. Regional is when the scope of ballot is limited to a specific part of the world (e.g., European, Pacific Rim, or North American) as opposed to international.
Standard (U.S. national)	A standard developed and successfully balloted inside the U.S., usually by a voluntary standards organization subject to basic ANSI guidelines.
Strategic planning	Those actions that lead to the definition of the IT organization's mission, the formulation of its goals, and the definition of the essential action to be implemented to meet those goals.
Strategy	Strategies are the "hows" of pursuing a mission and achieving goals. A strategy is a managerial action plan for achieving targeted outcomes, mirrored in the pattern of moves and approaches devised to produce desired results.
Strategy project	A managed set of activities that generate the IT Strategic Plan
System architecture	The model(s) that describes how the major IT elements (equipment, data sources, applications, and networking) are arranged to provide or exchange services between the elements and external entities (people or automated systems)
Target Application Platform	A Target Application Platform is the realization of an application platform described in the Target Architecture, using appropriately adapted custom or vendor provided frameworks (software and hardware products). The Target Application Platform is the physical environment upon which the applications for AIS are built, executed, and maintained.

Term	Definition
Target Architecture	The Target Architecture is the design for an instance of elements defined in the Technical Architecture. A Target Architecture elaborates the Technical Architecture by binding specific versions of software, hardware, data stores, and networking implementations to abstract Technical Architecture descriptions. A target Application Platform, for example, is a realization of an application platform described in the Technical Architecture, using appropriately adapted vendor provided frameworks (software and hardware products).
Task	In the context of project management, this is a well-defined unit of work that can be assigned to individuals to perform, and tracked to completion
Technical Architecture	A Technical Architecture identifies and describes the types of applications, platforms, and external entities; their interfaces; and their services; as well as the context within which the entities interoperate. A Technical Architecture is based on a Technical Reference Model (TRM) and the selected standards that further describe the TRM elements (the profile). The Technical Architecture is the basis for selecting and implementing the infrastructure to establish the target architecture.
Technical Reference Model	A taxonomy of services arranged according to a conceptual model, such as the Open System Environment model. The enumerated services are specific to those needed to support the technology computing style (e.g., distributed object computing) and the industry/business application needs (e.g., Human Services, financial).
Tier (n-tier)	A physical partitioning of an application across three or more networked computer platforms, such as user interface, business logic, and data access and storage functions.
Transcoding	The process of dynamically transforming data as it is delivered so that it is optimally formatted for the destination environment. Transcoding can be applied in many situations: character encoding (internationalization), addressing differences in link speed or display screen form factors (wireless), or converting between video compression formats.
Value chain	The collection of activities within a company that allow it to compete within an industry; the activities in a value chain can be grouped into two categories: primary activities, which include inbound logistics, outbound logistics and after-sales service, and support activities, which include human resources management, Department infrastructure, procurement, and technology development.
Vision	A guiding theme that articulates the nature of the organization's operation (business) and the intent for its future. It is a description of what senior management wants to achieve, usually refers to the mid- to long-term, and often is expressed in terms of a series of goals.
Web service	A unit of application logic providing data and services to other applications via ubiquitous Web protocols and data formats such as HTTP, XML, and SOAP. The service implementation (and physical location) is generally hidden from the user of the service.
Zero Dependency	The state of not being reliant

5.3. Missions and Visions of All NC DHHS Divisions and Offices

Division/Office	Mission	Vision
Aging and Adult Services, Division of (DAAS)	To promote the independence and enhance the dignity of North Carolina's older adults, persons with disabilities, and their families through a community-based system of opportunities, services, benefits, and protections that offer choice, and to help younger generations prepare for their later years.	North Carolina's older adults, adults with disabilities, and caregivers will be confident in knowing about and accessing needed supports and services as well as opportunities for civic engagement.
Blind, Division of Services for the (DSB)	To enable people who are blind or visually impaired to reach their goals of independence and employment	By 2008, DSB will be known across North Carolina as the leader in providing employment and independent living services for people who are blind or visually impaired
Budget and Analysis, Division of (B&A)	To provide leadership and support to DHHS and division management through (1) the development, execution and modification of the department's operating budget, (2) the research and analysis of issues that impact the department's budgets, plans and programs, and (3) development of innovative solutions to challenging problems	The Division of Budget and Analysis will enhance its capacity to serve as a cohesive group valued for innovative delivery of quality support services to the secretary and the agencies that comprise the department. In achieving this vision B&A will empower employees to continuously improve the quality of services; foster innovative workplace efficiency; promote communication and awareness of the division's role and services department-wide, and forge effective partnerships between the division and its stakeholders
Child Development, Division of (DCD)	To promote and support high quality early care and education to build a stronger social and economic future for North Carolina	DCD will lead the nation, providing a stellar start for NC's children
Citizen Services, Office of (OCS)	To guide citizens through the human resource delivery system by providing accurate and speedy information and referral for services to the proper department or agency and resolving customer complaints	The North Carolina Department of Health and Human Services' Office of Citizen Services has created a system that significantly enhances collaborative efforts with human service agencies in government and non-profits as well as with information and referral stakeholders across the state by ensuring that we are providing the most comprehensive state of the art service through the CARE-LINE, DHHS Ombudsman Program, DHHS Disaster Coordination Services and the Secretary's Customer Service Initiative
Controller, Office of (OC)	To support the North Carolina Department of Health and Human Services (NC DHHS), and all its divisions, facilities and schools in all fiscal operations so that they are accomplished according to state and federal requirements to the benefit of citizens, clients, and employees	The vision is to perform all accounting and financial functions for the department and provide accountability for the resources appropriated to the department

Division/Office	Mission	Vision
Deaf and Hard of Hearing, Division of Services for the (DSDHH)	To serve individuals who are Deaf, Hard of Hearing or Deaf-Blind, their families, and communities in North Carolina (NC) by enabling them to achieve equal access, effective communication and a better quality of life	Every person who is Deaf, Hard of Hearing, or Deaf-Blind in NC has equal access to those communication and human services that are provided to all individuals in the community
Developmental Disabilities, NC Council on	To ensure that people with developmental disabilities and their families participate in the design of and have access to culturally competent services and supports, as well as other assistance and opportunities, that promote inclusive communities	Building Bridges to Community
Economic Opportunity, Office of (OEO)	To administer grant programs that provide opportunities for low-income individuals and families to become self-sufficient through the provision of financial resources to community action agencies, limited purpose agencies and other community-based organizations for programs that will substantially reduce the number of citizens in our state who are living in poverty	By 2008, the OEO will be a leader in providing grant opportunities and technical assistance to local sub-recipients resulting in strategies and projects that better address the causes, conditions and problems of poverty in North Carolina
Education Services, Office of (OES)	To provide quality, comprehensive, developmental and educational opportunities for eligible students ages birth to 21 and their families so that students can develop the skills necessary to lead productive lives—vocationally, socially and personally—resulting ultimately in the achievement of their highest potential for independent and successful lives	The vision of OES is to be a national leader in providing early intervention and education services to children who are deaf and/or blind by ensuring that those children have the educational, communication, and technological tools to reach their highest potential
Facility Services, Division of (DFS)	To regulate medical, mental health and group care facilities, emergency medical services, and local jails. DFS improves the health, safety, and well being of individuals through effective regulatory and remedial activities including appropriate consultation and training opportunities and the rational allocation of needed facilities and services	DFS regulatory work promotes the development and safe provision of health care services and is conducted in a fair, professional, and competent manner
Human Resources, Division of (DHR)	To deliver superior human resource services that enhance the ability of DHHS offices and divisions meet programmatic and operational challenges	In the arena of human services, DHHS will be the employer of choice for those who aspire to serve in state government
Information Resource Management, Division of (DIRM)	To provide enterprise Information Technology (IT) leadership to the North Carolina Department of Health and Human Services (NC DHHS) and its partners so that they can leverage technology resulting ultimately in delivery of consistent, cost effective, reliable, accessible and secure services	The Division of Information Resource Management will support DHHS' commitment to provide nationally recognized quality services to the people of North Carolina through efficient, secure and reliable IT Service Delivery

Division/Office	Mission	Vision
Internal Auditor, Office of (OIA)	To provide the management of the North Carolina Department of Health and Human Services (NC DHHS) with <i>independent</i> audits and analysis of various functions and programs within the department. This includes operational audits, performance audits, compliance audits, financial audits, and special investigations. The office's overall objective is to provide management with <i>objective</i> information, analysis, appraisals, recommendations and pertinent comments which facilitate management to properly discharge its responsibilities	DHHS will have minimal exposure to audit risk as a result of effective and efficient control systems that are audited/reviewed on a regular schedule
Medical Assistance, Division of (DMA)	To provide access to medically necessary health care services to eligible NC residents so they can obtain high value, high quality health care services resulting ultimately in improved quality of life	The Division of Medical Assistance (DMA) will efficiently manage Medicaid and NC Health Choice for Children so that cost-effective health care services are available to all eligible persons across the state
Mental Health, Developmental Disabilities, and Substance Abuse Services; Division of (DMH/DD/SAS)	To provide people with, or at risk of, mental illness, developmental disabilities, and substance abuse problems and their families the necessary prevention, intervention, treatment services, and supports they need to live successfully in communities of their choice	NC residents with mental health, developmental disabilities, and substance abuse service needs will have prompt access to evidence-based, culturally competent services in their communities to support them in achieving their goals in life
Minority Health and Health Disparities, Office of (OMHHD)	To promote and advocate for the elimination of health disparities among all racial and ethnic minorities and other underserved populations in North Carolina	All North Carolinians will enjoy good health regardless of their race and ethnicity, disability or socioeconomic status
Policy and Planning, Office of (OPP)	To work with divisions and offices to develop effective policies, plans and procedures; analyze work processes and recommend improvements; and facilitate performance reviews of programs and services so that the NC Department of Health and Human Services can achieve continuous improvement	A results oriented culture will thrive throughout DHHS and the Office of Policy and Planning will be viewed as a leading factor in performance management and continuous improvement initiatives
Procurement and Contract Services, Office of (OPCS)	To provide training, guidance, and operational assistance to all of the North Carolina Department of Health and Human Services (NC DHHS) agencies so that they maximize financial and program capacities through effective procurement and contract practices while maintaining compliance with applicable regulations. This effort will result ultimately in improvements to the individual health, safety, well being, and independence of NC citizens	As a recognized national leader, the Office of Procurement and Contracting Services (OPCS) will operate in a high performance culture where procurement and contracting make direct and significant contributions to financial stability and improved service delivery to the people of NC

Division/Office	Mission	Vision
Property and Construction Services, Office of (OPC)	To provide efficient facility services for all areas of responsibility, with special emphasis on those services that enhance the quality of care for clients of the North Carolina Department of Health and Human Services (NC DHHS) divisions/facilities/schools and ensure work space conducive to the success of its employees in providing client services	All DHHS employees, clients and visitors will work or reside in facilities that meet or exceed environmental and aesthetic standards that contribute to quality outcomes for all
Public Affairs, Office of (OPA)	To provide the North Carolina Department of Health and Human Services (NC DHHS) with the tools for communicating its vision	The DHHS Office of Public Affairs (OPA) will provide the communications know-how to help all DHHS divisions, facilities, schools, and programs communicate effectively
Public Health, Division of (DPH)	§ 130A-1.1. Mission and essential services. (a) The North Carolina General Assembly (NC GA) recognizes that unified purpose and direction of the public health system is necessary to ensure that all citizens in the state have equal access to essential public health services. The GA declares that the mission of the public health system is to promote and contribute to the highest level of health possible for the people of NC by: (1) Preventing health risks and disease; (2) Identifying and reducing health risks in the community; (3) Detecting, investigating, and preventing the spread of disease; (4) Promoting healthy lifestyles; (5) Promoting a safe and healthful environment; (6) Promoting the availability and accessibility of quality health care services through the private sector, and (7) Providing quality health care services when not otherwise available	To add years of quality life for NC citizens, and to eliminate health disparities
Rural Health and Community Care, Office of (ORHCC)	To assist rural and medically underserved communities and populations to develop innovative strategies for improving health care access, quality, and cost effective delivery	The ORHCC will be a national leader in improving the health of North Carolina's rural and underserved people
Social Services, Division of (DSS)	To provide family centered services to children and families to achieve well-being through ensuring self-sufficiency, support, safety, and permanency	North Carolina's children will be safe and in permanent homes and families and adults will be self-sufficient and able to purchase nutritious food
Vocational Rehabilitation Services, Division of (DVR)	To promote employment and independence for people with disabilities through customer partnership and community leadership	By 2008, North Carolinians with disabilities will live and work in the communities of their choice with economic and other supports available to help them achieve and maintain optimal self-sufficiency and independence

5.4. Initiation of Governance Structure



North Carolina Department of Health and Human Services

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Michael F. Easley, Governor

Carmen Hooker Odom, Secretary

August 24, 2006

MEMORANDUM

TO: DHHS Division and Office Directors

FROM: Carmen Hooker Odom

RE: Establishment of IT Governance Committee to Review and Approve DHHS IT Requests

Significant Information Technology (IT) needs exist within DHHS; however, we are confronted with the challenge of limited funding to support these needs. Therefore, I am establishing a standardized process for reviewing and approving IT requests. This will allow the Department to look for opportunities for consolidation and enterprise solutions; to prioritize IT efforts across DHHS; and to facilitate, when applicable, the approval of DHHS IT projects by the State Chief Information Officer (CIO). As a result of establishing a standardized process for reviewing and approving IT requests, departmental management is expecting two major outcomes: (1) increased ownership of IT initiatives across DHHS, and (2) increased accountability for DHHS' IT assets and expenditures. An important facet of this process is standardizing business case development for and cost/benefit analysis of IT requests across the Department. Also, an internal process for reviewing and approving IT requests is being designed to flow seamlessly into the State CIO's approval process and project reporting requirements.

In addition, several important initiatives are requiring our Department's immediate attention and action. In response to Section 10.1.(a) requirements of Senate Bill 622, DHHS has been involved in the development of a detailed business plan, an IT plan directly tied to business requirements, and an IT architecture. DHHS will be submitting these documents to the General Assembly in December 2006. Additionally, the State CIO is requiring all agencies to submit both an IT Plan, including IT expansion items for the State Fiscal Year 2007-09 biennium, and agency plans for critical IT applications (e.g., retirements/replacements, eliminations/consolidations, modernizations and enhancements, on-going maintenance) by October 1, 2006. DHHS expansion requests, including IT expansion requests, are also due to the Office of State Budget and Management by November 15, 2006.

To achieve the outcomes previously mentioned, I am establishing an IT Governance Committee. This committee will be responsible for reviewing and approving IT requests submitted by DHHS Divisions and Offices that meet the criteria and/or thresholds established by the committee chair, prioritizing IT requests based on criticality to DHHS mission and goals and

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within funding limitations, and reviewing and approving significant changes to IT initiatives. I am appointing the Assistant Secretary for Finance and Business Operations to chair the IT Governance Committee. A process flow describing the DHHS IT Review and Approval Process is attached. Please share this information with your managers.

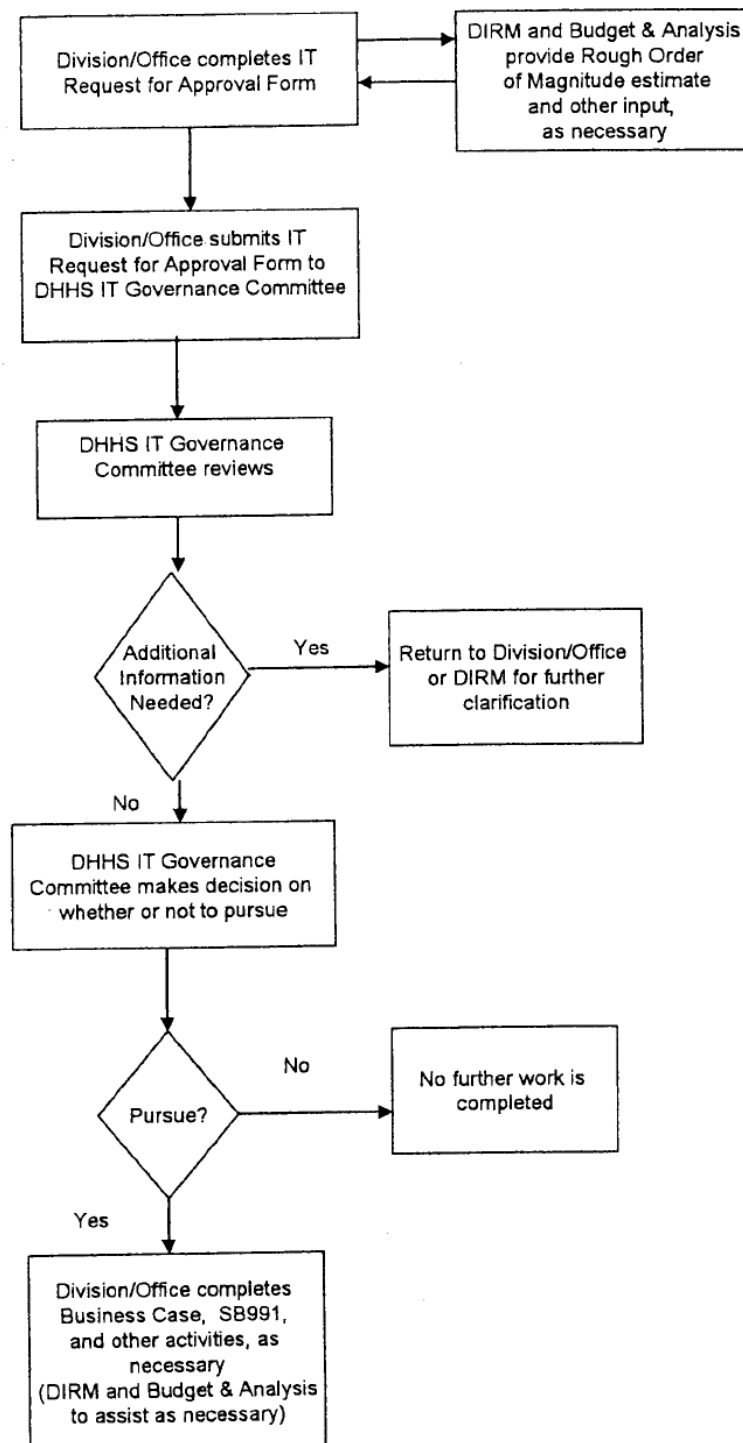
I have asked the Division of Information Resource Management and the Division of Budget and Analysis to work together in scheduling training for Divisions and Offices regarding how this process will work. Templates and instructions for submitting IT requests will be addressed in the forthcoming training sessions.

Thank you in advance for your support and assistance as we establish a standardized process for reviewing and approving IT requests across the Department.

Attachment (1): *DHHS IT Governance Committee – Process Flow*

cc: Allyn Guffey, DHHS Assistant Secretary for Finance and Business Operations
Dr. Allen Dobson, DHHS Assistant Secretary for Health Policy and Medical Assistance
Jackie Sheppard, DHHS Assistant Secretary for Long-Term Care and Family Services
Dan Stewart, DHHS Assistant Secretary for Policy, Planning, and Compliance
Jim Slate, Division of Budget and Analysis Director
Karen Tomczak, Division of Information Resource Management Director
DHHS Budget Analysts

DHHS IT Review and Approval Process Flow



5.5. Document References

5.5.1. Federal Government Documents

- *IT Planning and Management Guides*, National Human Services IT Resource Center (NHSITRC), Administration for Children & Families (ACF), US Department of Health and Human Services

5.5.2. NC Government Documents

- *NC DHHS Business Plan*, Office of Policy and Planning, NC DHHS, December 1, 2006
- *Agency Information Technology Plan*, Division of Information Resource Management, NC DHHS, October 2006
- Memorandum to NC DHHS Division and Office Directors from Carmen Hooker Odom, regarding IT Governance Committee, October 2, 2006
- Memorandum to NC DHHS Division and Office Directors from Carmen Hooker Odom, regarding Establishment of IT Governance Committee to Review and Approve DHHS IT Requests, August 24, 2006

5.5.3. Order of Precedence

- In the event of conflict between this *Technology Plan* and other documents referenced herein, the documentation requirements of this standard shall apply.
- All documents referenced are to the identified issues/versions unless otherwise stated. Where no issue/version is quoted, the issue/version in force at the date of actual agreement/contract shall apply. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

End of Document